



STAND ALONE EXPLOSION PROOF TRANSMITTER

Gas Detection For Life

M2 Series



Features

- Operates independent from a controller
- Direct digital readout on backlit LCD
- Available for LEL, H₂S, CO, and O₂
- 4-20 mA & digital Modbus outputs standard
- Non-intrusive calibration via magnetic wand
- 2 fully programmable alarm relays & fail relay
- H₂ specific LEL version available
- IR sensors available for LEL & CO₂
- Patented water repellent sensor coating
- User friendly setup push buttons & LCD menus
- CSA, and/or UL approved

Industry Applications

- Petrochemical plants
- Refineries
- Offshore drilling platforms
- Water & wastewater treatment plants
- Offshore oil rigs
- Pulp & paper mills
- Gas, telephone, & electric utilities
- Parking garages
- Manufacturing facilities
- Steel
- Automotive

The RKI M2™ is a state-of-the-art transmitter that can operate as an independent, stand-alone system or as part of a system connected with an analog or digital signal to virtually any controller, PLC, or DCS. The M2 series detects LEL combustibles, oxygen, hydrogen sulfide, or carbon monoxide. It utilizes a magnetic wand technique for performing non-intrusive calibration. The M2 provides an automatic zero drift correction feature, which results in more stable readings and reduces the need for adjustments due to sensor aging.

The M2 housing does not need to be opened for zeroing or calibration, making it unnecessary to declassify the area for routine maintenance. Internal push-buttons can also be used if the housing is opened. It is designed so that a complete field calibration can be performed by one person. The stainless steel flame arrestor that covers the sensor (LEL, H₂S, CO, or XP Oxygen) is water repellent with a special patented water resistant coating.

The M2 provides a 4-20 mA output in addition to a Modbus digital output. It also has two levels of alarm with relays, plus a fail alarm with a relay. A digital display of the gas concentration, as well as alarm and status lights can be viewed through the front window.

The M2 represents the latest leading edge technology in sensor / transmitters today.

M2 Series

Sensors	LEL	O ₂	H ₂ S	CO	CO ₂	CH ₄	HC
Types	Catalytic	Galvanic cell	Electrochemical		Infrared		
Part#	65-2610RK 65-2610RK-05 65-2611RK (H2 Specific) 65-2611RK-05	65-2613RK 65-2613RK-05 *65-2614RK	65-2615RK-05	65-2616RK-05	65-2630RK-03	65-2619RK-CH4	65-2619RK-HC
Measuring Ranges	0 - 100 % LEL	0 - 25.0 % Vol	0 - 100 ppm	0 - 300 ppm	0 - 5% Vol	0 - 100% LEL	
Weather Resistant	Patented water repellent sensor coating (*Except for 65-2613RK and 65-2614RK)						
Outputs							
Analog	4-20 mA signal, into 500 ohms impedance max, corresponding to 0 - full scale						
Digital	Modbus RTU output standard, fully configurable, 2-wire RS-485, 1200 to 19.2k baud						
Alarms							
Alarm Settings	Fully programmable alarm setpoints, increasing / decreasing, latching / self-resetting, on delays, off delays, normally energized or de-energized, programmable deadband, programmable smoothing filter						
Alarm Indication	Visual LEDs. Alarm 1, Amber; Alarm 2, Red; Fail, Red						
Relays	5 amp form 'C' contacts for alarm 1, alarm 2, and fail						
Physical							
Dimensions	Height: 8.5" (215 mm), Width: 5.2" (132 mm), Depth: 4.5" (114 mm)						
Display	Alphanumeric display with backlighting. 8 characters per line; 2 lines for gas concentration readout, plus user-friendly calibration and setup						
Enclosure	Explosion proof for Class I, Div 1, Groups B, C, D.						
Enclosure Rating	NEMA 4, explosion proof, watertight, cast aluminum with o-ring seal and epoxy powder coating						
Controls	Magnet used for calibration functions. Calibrates without opening the housing. Internal push-button controls also available for calibration and setup						
Operating Environment							
Operating Temperature	-4°F ~ 122°F (-20°C ~ 50°C)						
Relative Humidity	5 - 95% RH non-condensing						
Location	Indoor or outdoor. Explosion proof for Class I, Div. 1, Groups B, C, and D. (Oxygen available in non XP version also)						
Operating Voltage	19 VDC - 30 VDC						
Approvals	65-2610RK-05 65-2611RK-05 c CSA US	65-2610RK-05 65-2611RK-05 c UL US	65-2613RK-05 c CSA US	c CSA US		c UL US	
Warranty	One year material and workmanship						

Note:

IR LEL sensors are recommended for applications where catalytic sensors historically do not hold up, such as areas where catalytic poisons may be present (for example: silicone vapors, high H₂S, or halogenated hydrocarbons). The IR LEL sensor is especially well suited for offshore oil rigs and wastewater treatment plants.

*Partial pressure sensor for helium applications. Consult factory for details.

*Specifications subject to change without notice.

Made in the USA



A9812



ISO 9001:2000

Authorized Distributor:

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